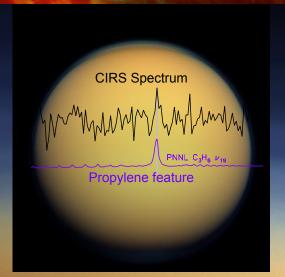


## Discovery of propylene in Titan's upper atmosphere with Cassini CIRS

- Cassini's Composite Infrared
   Spectrometer (CIRS) Team detected
   a new molecule, propylene (propene)
   in Titan's upper atmosphere.
- Significance: First definitive identification of propylene gas in a planetary atmosphere outside Earth.
- Propylene is an important raw material for our chemical industry. It is used to make polypropylene, a durable plastic that is molded into many commercial common items, including food storage containers.





Detection of Propene [Propylene] in Titan's Stratosphere C. Nixon, D. Jennings, B. Bézard, S. Vinatier, N. Teanby, K. Sung, T. Ansty, P. Irwin, N. Gorius, V. Cottini, A. Coustenis, F. M. Flasar. Astroph.J.Lett. 776, 2013